CLAIMS

1. Use of compositions comprising, in quantities sufficient to ensure the required performance, polyester resins with mean numeral molecular weights greater than 10000 formed by recurring units X = $[O-(CH_2)_n-OCO-(CH_2)_m-CO]$ and/or Y = $[O-(CH_2)_k-CO]$, where the half-sum of n + m is equal to or greater than 6 and k is a number equal to or greater than 6, or by copolymers comprising units and/or sequences having the formula $x_i[O-(CH_2)_{mi}-OCO-(CH_2)_{mi}-CO]$; y_j $[O-(CH_2)_{kj}-CO]$ where: i,j = 1-5; n_i = 2-22; m_i = 0-20; k_j = 1-21;

$\sum_{i=1}^{5} x_i + \sum_{j=1}^{5} y_j = 1$ and x_i and y_j vary between 0 and 1 and are molar fractions of the various units such that

$$\sum_{i=1}^{5} x_i \cdot \left(\frac{n_i + m_i}{2}\right) + \sum_{j=1}^{5} y_j \cdot k_j \geq 6$$

or by recurring units Z=$[O-(CH_2)_a-OCO-(CH_2)b-CO]$ where a=2-3, b=7-11,

present in sufficient quantity to ensure good barrier properties and biodegradability of the resins for the manufacture of articles having a permeability to water vapour of less than 350 gx30μm/m^2 per day at 38°C and 90% RH, said articles showing decomposition in composting conditions on 30μm film of less than 10% in 14 days and more than 90% in six months.

2. Use according to Claim 1, in which the polyester resins have a melting point of between 60 and 110°C.

3. Use according to Claim 1, in which the polyester resin

is produced by polycondensation of bicarboxylic aliphatic acids with from 2 to 22 carbon atoms and of diols with from 2 to 22 carbon atoms, selected in a manner such that the half-sum of the number of carbon atoms relating to the acid and to the diol is greater than 6, or by polycondensation of hydroxy-acids, or by ring-opening of corresponding lactones or lactides having from 7 to 22 carbon atoms.

4. Use according to Claim 1, in which the diacids and the dialcohols are obtained from renewable sources.

5. Use according to ~~any one of the preceding~~ claims, in which the polyester resin is selected from polyethylene sebacate, polybutandiol sebacate, polyhexandiol azelate, polyhexandiol sebacate, polynonandiol azelate, polynonandiol sebacate, polyoctandiol azelate, polyoctandiol brassilate, polydecandiol sebacate and polydecandiol brassilate.

6. Use according to ~~any one of the preceding~~ claims, in which the polyester resin has an intrinsic viscosity greater than 0.7 dl/g in chloroform at 25°C.

7. Use according to ~~any one of the preceding~~ claims, in which the polyester resin is subjected to an upgrading process.

8. Use according to ~~any one of the preceding~~ claims, in which the polyester resin is a component of a blend of unmodified or modified polysaccharides.

9. Use according to any ~~one of the preceding~~ claims, in

which the polyester resin contains mineral or vegetable fillers and/or additives selected from lubricants, plasticizers, colourings, flavourings, perfumes, flame-proofing agents, stabilizers with regard to hydrolysis and to thermal degradation, and antioxidants.

10. Use according to ~~any one of the preceding~~ claims, in which the mean numeral molecular weight of the polyester resin is between 45000 and 70000.

11. Use according to Claim 1 wherein said articles are selected from:

- coatings which are produced by extrusion-coating, with water-vapour barrier properties, and which are usable for the packaging of fresh milk and dairy products, of meat, and of foods having high water content,
- multi-layer laminates with layers of paper, plastics material or paper/plastics material, aluminium and metallized films,
- films as such and multi-layer films with other polymer materials,
- sacks for organic refuse and for grass cuttings with periods of use longer than 1 week,
- single-layer and multi-layer food packaging comprising containers for milk, yoghurt, cheeses, meat and beverages, in which the layer in contact with the food or beverage is formed by the aliphatic polyester,
- composites with gelatinized or destructured starch, and/or complexed starch or natural starch as a filler,
- mono-directional and bi-directional films,
- semi-expanded and expanded products produced by

physical and/or chemical means, by extrusion, injection, or agglomeration of pre-expanded particles,

- expanded sheet and expanded containers for foods, for drugs, and for fast food,
- fibres, fabrics and non-woven fabrics in the hygiene, sanitary and clothing fields,
- composites with mineral and vegetable fillers,
- thermoformed sheets for the food or fast-food packaging fields,
- bottles for the food, cosmetics and pharmaceutical fields,
- fishing nets,
- containers for fruit and vegetables,
- extruded sections usable in the fast-food field and irrigation pipes in the agricultural field.

12. Use of polyester resins as defined in Claim 1 in blends with other biodegradable polymers having a permeability to water vapour greater than 300 gx30μm/m² per day at 38°C and 90% RH.

13. Use of polyester resins as defined in Claim 1 in blends with polylactic acid.

14. Use of polyester resins as defined in Claim 1 in blends with other non-biodegradable polymers, the said polymers having a permeability to water vapour of less than 300 gx30μm/m² per day at 38°C and 90% RH.